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Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations
- of inventorship (Rule 4.17(iv)) for US only

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: FOAM SECURITY SUBSTRATE

(57) Abstract: The present invention is directed to an oriented, foamed article having an integral security element, and a method of making the article. The oriented foam article is particularly useful in the preparation of printed security documents such as currency, stock and bond certificates, birth and death certificates, land titles abstracts and the like.

INTERNATIONAL SEARCH REPORT

PCT/US 03/11347

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 B42D15/00 B32B27/32

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 IPC 7 B42D B32B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2001/000236 A1 (BENOIT GORDON L ET AL) 12 April 2001 (2001-04-12) abstract paragraphs '0024!', '0026!'-'0030! paragraphs '0032!', '0033! paragraphs '0080!'-'0085! ----	1-5, 25-33
A	WO 00/18575 A (MOBIL OIL CORP) 6 April 2000 (2000-04-06) abstract page 6, line 17 -page 8, line 10 page 13, line 11 -page 14, line 37 ----- -/--	1-5, 25-33

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

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INTERNATIONAL SEARCH REPORT

PCT/US 03/11347

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>LAU H C ET AL: "MELT STRENGTH OF POLYPROPYLENE: ITS RELEVANCE TO THERMOFORMING"</p> <p>POLYMER ENGINEERING & SCIENCE, SOCIETY OF PLASTICS ENGINEERS, US, vol. 38, no. 11, November 1998 (1998-11), pages 1915-1923, XP000848934 ISSN: 0032-3888</p> <p>the whole document</p> <p>page 1917, line 14 - line 18</p> <p>figures 4,5,7,8</p> <p>page 1920 -page 1921</p> <p>----</p>	1-5, 25-33
A	<p>EP 1 209 519 A (EASTMAN KODAK CO)</p> <p>29 May 2002 (2002-05-29)</p> <p>paragraph '0029! - paragraph '0031!</p> <p>paragraph '0040!</p> <p>----</p>	1-33
X	<p>WO 02/00412 A (3M INNOVATIVE PROPERTIES CO ;GEHLEN MARK D (US); STROBEL JOAN M ()</p> <p>3 January 2002 (2002-01-03)</p> <p>abstract</p> <p>page 4, line 5 -page 9, line 7</p> <p>page 12, line 29 -page 15, line 18</p> <p>page 15, line 30 -page 17, line 5</p> <p>examples 10,11</p> <p>claims 17,18</p> <p>----</p>	6,20-23
A	<p>US 2001/021450 A1 (RAMESH N S)</p> <p>13 September 2001 (2001-09-13)</p> <p>figure 1</p> <p>paragraphs '0025!-'0027!,'0035!,'0045!</p> <p>----</p>	6-24
A	<p>WO 01/30570 A (CESSNA LAWRENCE C ;CRANE STEPHEN (US); BRUNSWICK CORP (US))</p> <p>3 May 2001 (2001-05-03)</p> <p>abstract</p> <p>figures 1,2</p> <p>page 22, line 4 - line 25</p> <p>-----</p>	6-24

INTERNATIONAL SEARCH REPORT

PCT/US 03/11347

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-5,25-33

A security substrate comprising at least one oriented high melt-strength polypropylene foam layer and at least one security element.

2. Claims: 6-24

A multilayer article comprising an oriented high melt-strength polypropylene foam layer (the foam layer of claim 1) and at least one thermoplastic film layer.

INTERNATIONAL SEARCH REPORT

Information on patent family members

PCT/US 03/11347

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information on patent family members

International Application No

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